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PTO/SB/21 (02-04)

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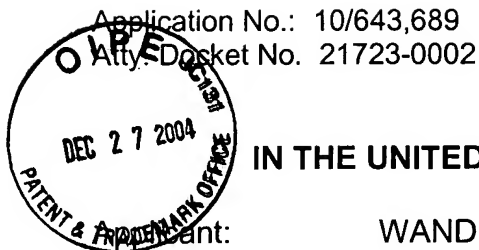
<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/643,689	
	Filing Date	August 19, 2003	
	First Named Inventor	WAND et al.	
	Art Unit	3753	
	Examiner Name	LEO, LEONARD R.	
Total Number of Pages in This Submission	55	Attorney Docket Number	21723-0002

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Reply  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  <b>Return Receipt Postcard; Certificate of Mailing; Cited Foreign References (3); International Search Report (4 pages)</b>
<div>Remarks</div>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	McNees Wallace & Nurick LLC K. Scott O'Brian
Signature	
Date	December 22, 2004

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
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Signature		Date	December 22, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: WAND et al. ) Group Art Unit: 3753  
Application No.: 10/643,689 ) Examiner: LEO, LEONARD R.  
Filed: August 19, 2003 ) Atty. Docket No. 21723-0002  
For: PLATE HEAT EXCHANGER WITH ENHANCED SURFACE FEATURES

Mail Stop AMENDMENT  
Commissioner for Patents  
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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

SIR:

The following are included with this Information Disclosure Statement:

- ☒ **A. PTO/SB/08**
- ☐ **B. CERTIFICATION**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- ☐ **C. \$180.00 FEE PAYMENT**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- ☐ **D. \$180.00 PETITION, CERTIFICATION & PETITION FEE PAYMENT**  
(37 C.F.R. 1.97(d)-before issue fee payment)

The following are submitted in the above-identified application in compliance with 37 CFR 1.98:

- ☐ **I. A copy of each listed U.S. Patent and U.S. Patent application publication [1.98(a)(2)(i)].**
- ☒ **II. A copy of each listed foreign patent and/or published foreign patent application. For each listed foreign patent and/or published foreign patent application [1.98(a)(2)]:**
  - ☒ **a) the English language version or an English translation if not published in English, if available (see PTO-1449)[1.98(a)(3)]; and/or**

- ☐ b) U.S. counterpart patents or English language equivalents of the foreign patents or published foreign patent applications (see PTO-1449); and/or
- ☐ c) a concise explanation of the relevance of the listed patents, publications or other information (see PTO-1449, foreign search report or other, attached), as it is presently understood by the person signing this disclosure, since no English translation is currently available[1.98(a)(3)].
- ☐ III. A copy of each listed publication, other than published foreign applications. For each listed publication [1.98(a)(2)]:
  - ☐ (a) an English translation, if available, when the original publication is not in the English language (see PTO-1449)[1.98(a)(3)];
  - ☐ (b) a concise explanation of the listed publications (see PTO-1449), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- ☐ IV. For any other listed information, a copy of the information or that portion which caused it to be listed (see PTO-1449)[1.98(a)(2)(iii)].
- ☐ V. Each listed U.S. Patent, Publication or other information that was previously cited by or submitted to the Office in a prior application, which application is relied upon for an earlier filing date under 35 U.S.C. § 120 [1.98(d)].
- ☒ VI. Copies of each listed U.S. Patent and U.S. Patent application publication are not being submitted herewith pursuant to a waiver of 37 CFR 1.98(a)(2)(i) by the USPTO on July 11, 2003 for applications filed after June 30, 2003.

This information is submitted in the above-identified application in compliance with 37 C.F.R. 1.97 because:

- ☐ 1. This information disclosure is submitted within three months of the filing date of the application, or before the mailing date of the first office action on the merits of the application [1.97(b)].
- ☐ 2. This information disclosure is submitted before the mailing date of a final action in this application under 1.113[1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).

- ☐ 3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).
- ☐ 4. This information disclosure is submitted after the mailing date of a final action under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 5. This information disclosure is submitted after the mailing date of a notice of allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 6. This information disclosure statement is submitted with the statement required for items 2, 3, 4 or 5 above [1.97(c), (d), (e)]:
- ☐ I, **K. Scott O'Brian**, hereby state the following:
- ☐ **Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.**
- ☐ **No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement.**
- ☐ 7. This information disclosure statement is submitted with the fee of \$180 set forth in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item 6 statement is provided).

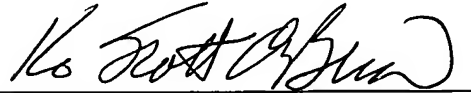
Application No.: 10/643,689  
Atty. Docket No. 21723-0002

- ☐ 8. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059.

Dated: December 22, 2004

Respectfully submitted,

McNees Wallace & Nurick LLC



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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 1

**Complete if Known**

Application Number	10/643,689
Filing Date	August 19, 2003
First Named Inventor	WAND et al.
Art Unit	3753
Examiner Name	LEO, LEONARD R.
Attorney Docket Number	21723-0002

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	A	US- 2004/011515 A1	01-22-2004	Matsushima	
	B	US- 3,049,796	08-21-1962	Pall	
	C	US- 3,523,577	08-11-1970	Milton	
	D	US- 4,130,233	12-19-1975	Chisholm	
	E	US- 4,201,263	05-06-1980	Anderson	
	F	US- 4,434,842	03-06-1984	Gregory	
	G	US- 4,458,748	07-10-1984	Yamada et al.	
	H	US- 6,230,408 B1	05-15-2001	Ehrfeld et al.	
	I	US-			
	J	US-			
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	1	EP 1 394 491	03-03-2004	Onda		
	2	GB 1 395 013	05-21-1975	APV Co. Ltd.		
	3	WO 01/93976 A2	12-13-2001	Battelle Memorial Institute		

Examiner  
SignatureDate  
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Supplemental Information Disclosure Statement (4 pages)  
PTO/SB/08  
Cited References (3)  
PCT International Search Report (4 pages)

Attorney Docket No.: 21723-0002  
Application No.: 10/643,689  
Filed: August 19, 2003

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